**Development Services**
1775 12th Ave NW
Issaquah, WA 98027
PH: 425-837-3100
*issaquahwa.gov*

# Non-Residential & Multi-family Construction Permit Submittal Requirements

The following items must be provided in order to properly apply for a building permit, including new construction and additions. Plans and application will not be reviewed if information is incomplete. The applicable department director may require additional information or materials when necessary to augment a permit application.

**NOTE:**

1. **A Pre-Submittal Meeting may be required prior to a permit submittal. Please contact the Permit Center at 425-837-3100 for more information.**
2. **A shoreline permit is required if the structure will be located within 200 feet of Lake Sammamish, Issaquah Creek, or the East Fork of Issaquah Creek.**

## How to Apply

1. Gather all documents as required by the submittal packet
2. Save all documents in PDF format per the Electronic Plan Requirements
3. Go to MyBuildingPermit.com and apply

# I. Application Checklist

The checklist below is an overview of the City's submittal requirements for all written documentation. For a comprehensive list of requirements, please review the remainder of this guide. Please note, that permit applications missing one or more items listed are considered incomplete and will delay the permit review process.

| ✓ | Item |
|---|---|
| **Pre-submittal Requirements** | |
| | Land Use Permit Notice of Decision has been issued |
| | **Approved King County septic system permit**, if applicable |
| | Sammamish Plateau Water & Sewer **Certificate of Water Availability**, if applicable |
| | Have **Pre-submittal meeting** with Permit Center (425-837-3100) |
| **Forms** | |
| | **Permit Application** |
| | **Utility Application** |
| | **King County Residential or Non-Residential Sewer Use Certification form**, if project is not within Sammamish Plateau Water and Sewer District or Bellevue Water |
| | **Temporary Erosion and Sediment Control (TESC) Report form** |
| | **Plumbing and Mechanical fixture count form** |
| **Supporting Documents** | |
| | **Land Use Condition List**: list all land use conditions and explain how they have been met by this permit or alternatively in which other construction permit they will be satisfied |
| | **Geotechnical Design Report** (See Soils Report Requirements handout) |
| | Copy of **Recorded Easements** |
| | Hazardous Materials Inventory and Management Plan, if applicable (Critical Aquifer Recharge Area – CARA) |
| | **Structural Calculations** (gravity and lateral load calculations required – stamped by Professional Engineer licensed in the State of Washington) |
| | **Civil Structural Calculations** |
| | **Storm-water Technical Information Report (TIR)**<br>For projects 2,000 – 5,000 s.f. submit Storm-water Drainage Report for Small Sites form<br>For projects over 5,000 s.f. see Civil Storm Drainage / TESC / Utilities Plans section of this document |
| | **Energy Code Compliance** forms and calculations (combine to 1 PDF document) |
| | **King County Health Department** letter and/or stamped plans of approval from for any of the following types of buildings: food service, schools, hospitals, nursing homes, public/semi-public pools/spas |
| | **Covenant Not-to-Sue (flood hazard, steep slope, coal mine hazard)**, if required |
| | **Shared Parking Plan**, if applicable (see land use conditions) |
| | **Transportation Management Plan**, if applicable (see land use conditions) |
| | **City Vision on Sustainable Development** Discuss how the proposed project will address the City's Vision and if you plan to certify the development as green building |
| | **Signed Green Building Expediting Agreement**, if expediting is sought. Draft green building checklist (LEED for commercial; Built Green 5 star for residential). Draft checklist incorporated into the plans |
| | **Solid Waste Service Company Approval of Access and Collection Space Standards** |
| **Plans and Drawings (For applications submitted through MyBuildingPermit.com)** | |
| | Plan set including plumbing, mechanical and electrical drawings must be in one pdf and comply with our Electronic Plan Requirements |
| **Intake Fee** | |
| | Plan check fee deposit required at time of submittal. **Cash or check only**. *(other permit fees will apply – see Permit Technician for more information)* Based on project valuation. |

## II. Plan Set Format Requirements

All drawings submitted shall conform to the following requirements:

a. **Sheet size:** 24"x36" (preferred) or 30”x42”
b. **Volumes:** Maximum of 120 sheets per volume. Each volume must have its own cover page and index
c. **Title Block:** Locate on right hand margin and provide:
   - Project name
   - Drawing title and drawing number
   - Revision block
   - Provide a 3” x 3” blank area on a consistent location on each sheet preferably in the title block or on the right side of the sheet
   - Project address
   - Name and address of firm or contact responsible for the drawing
   - Washington State registered Architect/Engineering stamp and signature
d. **Scale:**
   - Unless site size dictates a different scale, site (civil) drawings: 1’=20'
   - Architectural plans: 1/4"=1'-0” unless impractical
e. **Details:** All construction and structural details **must** be cross referenced and included in the full size plan set. Do not submit details in a separate document packet.
f. **North Arrow:** All plan sheets must include a north arrow

## III. Required Component Index (see section IV for specific requirements)

- ☐ Cover Sheet
- ☐ Site Plan - Architectural
- ☐ Civil Grading Plan
- ☐ Civil Drainage Plan
- ☐ Civil Utilities Plan
- ☐ Civil Paving Plan
- ☐ Civil Sewer Plan

} May be combined into one or more sheets as needed

- ☐ TESC Plan
- ☐ Landscape Plans - Conceptual
- ☐ Elevations
- ☐ Architectural Foundation Plan
- ☐ Structural Foundation Plan
- ☐ Typical Floor Plans
- ☐ Reflected Ceiling Plan
- ☐ Architectural Cross Sections and Details
- ☐ Door, Window, Hardware, Finish Schedules
- ☐ Roof Plan
- ☐ Structural Cross Sections and Details
- ☐ Structural Notes
- ☐ Lateral (seismic) and Gravity Design
- ☐ Plumbing Plans
- ☐ Mechanical Plans
- ☐ Electrical Plans
- ☐ Exterior Lighting Plan
- ☐ Construction Coordination Plan

## IV. Plan Set Components

The information described under the drawing titles is a minimum requirement for building permit submittal

### 1. Cover Sheet

a. **Site area** in square feet and acres
b. **Vicinity Map**
c. **Space for approval stamps**
   - Provide a 9" x 9" blank area on the cover sheet in the lower right hand corner of the page to the left of the title block
d. **Site data Summary** (include required/allowed and proposed)
   I. Number of dwelling units/acre (if applicable)
   II. Area of proposed structure(s)
   Gross
   Net
   III. Floor Area Ratio
   IV. Total coverage of impervious surface (IMC 18.07.050)
   V. Building Height as defined in IBC
   VI. Building Height as defined by land use code
   VII. Parking: Number and type (include bike)
   VIII. Landscaping: area in square feet
e. List of all current **applicable codes** (see code page)
f. **Building Data**
   I. Type of construction (list if sprinkler or non-sprinkler)
   II. Occupancy group(s)
   III. Occupant loads
   IV. Type of fire system (wet, dry etc.) and standard used (NFPA-13 or NFPA 13R)
   V. Number of stories
   VI. Allowable floor area
   VII. Proposed floor area
   VIII. Mixed Use Ratios
g. **List any deferred submittals**
h. Reference any approved **Alternate Materials or Methods of Construction** used on this project

### 2. Site Plan

a. **Property lines:** Show the location and dimensions. Please indicate point of beginning if the legal description is a metes and bounds description.
b. **Adjacent right-of-way:** Locate and label the existing centerline, curb, sidewalk and all proposed surface hardware. Distances to right-of-way centerline must be indicated. Indicate road type and design speed
c. **Streets and alleys:** Show location, name or number of all streets and alleys adjacent to the site. Show any off-site easements or private streets that provide access from the site to a public road
d. **Easements:** Show the location for all existing and proposed utility, open space, drainage, native growth protection and access easements, and accurately dimension. Show all Tracts
e. **Existing and proposed structure:** Show location, overall dimensions and use of all existing and proposed buildings and structures on the site; show distances to property lines
f. **Setbacks** to property lines, including between buildings, architectural features and retaining walls
g. **Accessible route:** Show location of accessible route from public transportation stops, accessible parking spaces and all accessible features to accessible building entrances. Identify slopes and dimensions of all walks, ramps, stairs, etc. Provide clear references to fully detail all accessible elements
h. **Indicate** Water meter location, meter size, supply, service line sizes, standpipes and fire department connections
i. For **residential**, indicate number of **bedrooms** per unit

j. Indicate compact, full size, and accessible **parking** spaces. Show dimensions of all garages and indicate proposed tandem parking spaces. Indicate signage for compact and handicapped spaces. Indicate bike racks and loading spaces. Indicate overhangs
k. **Pedestrian circulation:** Show the layout of all internal walkways and connection to public sidewalks, trails and/or right-of-ways. Provide details and enlargement of pedestrian areas, including handicapped ramps
l. Clearly indicate **demolitions** and **additions**
m. **Indicate** all plazas, patios, courtyards, and play areas.
n. **Indicate** location of mailboxes, utility vaults, hydrants, fire department connection, electrical equipment pads, flagpoles, all exposed HVAC equipment, and traffic signs
o. **Parking and circulation:** Locate and dimension all entry drives. Show the proposed layout including parking stall angle, bay and aisle width, and provide typical dimensions for stall width and length to the wheel stop. Locate and dimension on-site loading areas
p. **Planting and vegetation area:** Show all areas for new planting and all areas of existing vegetation to be retained. Please ensure that landscaping plans are compatible with the architectural site plan. Show above ground utilities on landscape plans
q. **Walls, rockeries and fences:** Indicate location, length and height. Provide section and elevation details for new construction. Indicate utility crossings
r. **Spot and topography elevations:** Show surface elevation at each corner of the site. For sites with slopes greater than 10%, show existing and proposed contours at 2' intervals. Indicate portions of sites with slopes greater than 15%. Locate temporary and permanent benchmarks
s. Indicate **dumpster or trash enclosures**
t. All plans must be printed in the same orientation that the structure(s) will be built. We do not accept plans that are reflected or mirrored images. This includes site plans, floor plans, elevation and structural drawings

## 3. Civil Grading Plan

Show existing contours as established by the topographical survey. Show proposed contours and clearly identify each. **Spot and topography elevations:** Show surface elevations for sites with slopes greater than 10%, show existing and proposed contours at 2' intervals. Indicate portions of sites with slopes greater than 15%. Locate temporary and permanent benchmarks

a. Spot elevations: Provide finished grade spot elevations for the following locations:
    I. Around the structure(s) base at all corners
    II. Within proposed paved areas at all corners, high and low points
    III. At the top and bottom of all existing and proposed walls (rockery, retaining, etc.). Elevation at ends and high and low points
    IV. At the top and bottom of all steps
    V. At the top and bottom of all ramps
b. Distinguish between areas of 15% to 40% slopes and slopes of 40% and greater
c. Show location, buffers, and building setbacks of all critical areas on site and adjacent to the site
d. Location and type of all retaining walls and/or rockeries and details
e. Show limits of clearing and grading
f. Location of all significant trees (see definitions sheet). Identify trees to be removed and retained. Identify tree species and diameter (at breast height) for each retained tree
g. Show surveyed floodplains, surface waters and wetlands
h. Show excavation and fill quantities
i. Show location of all proposed structures and impervious surfaces
j. Provide typical curb and gutter section showing elevations and dimensions (Indicate location of all existing utilities and lines, including electrical, telephone, gas, water, sewer, cable TV, storm, and fiber optic cables, structures and easements. Show sizes and types
k. Plans shall be stamped and signed by a Washington State licensed civil engineer

## 4. Civil Storm Drainage / TESC / Utilities Plans

Additional requirements may be found in the TESC Report supplemental document. Please include a copy of this supplemental document with your application submittal

a. Storm drainage plans and calculations in accordance with the City of Issaquah's Development Standards, edition current at the time of application for permits. Plans must be stamped and signed by a Washington State licensed civil engineer
b. TESC Plan
c. Surveyed location of all surface water features, floodplains, and/or wetlands
d. Location of all contributing off-site drainage
e. Location of existing storm drainage system
f. Provide details of pollutant separation and treatment (oil/water separators, etc.)
g. Location of proposed water and sewer service lines from mainline facility to building(s)
h. Location of all proposed impervious surfaces
i. Location of roof downspout connection to storm drain system

## 5. Landscape plans - Conceptual

The landscape plans at this stage are conceptual. A separate landscaping permit will be required before permit final

a. Clearly label landscape pages as “Conceptual – Not for Construction”
b. General: Locate and label all existing and proposed groundcover, shrubs and trees. Distinguish between deciduous and evergreen trees
c. Trees to remain: Location of all significant trees (6” diameter measured at 4.5’ above grade). Trees to be removed shall be indicated by an ”X”
d. Plant legend: List all proposed plants. Provide the symbol, quantity, common and botanical names, proposed size and spacing
e. Show all existing and proposed utilities. i.e.: power vaults, hydrants, overhead wires, lights, poles, signs, etc. in relation to plantings
   Show typical sections of all sidewalks, paths and trails. Show locations of landscape structures such as arbors, trellises, monuments and fences. (structural calculations are required for structures over 7’ tall)
f. Plans are to be stamped and signed by a Washington State registered landscape architect, certified nurseryman, or certified landscaper if the subject property exceeds one acre
g. Show location of water meter and backflow prevention device

## 6. Elevations

a. Show elevations of every side of the building, finished floor level for each floor, proposed grades, maximum building height and maximum site slope
b. Identify grade plane elevation: Show evaluation based on IBC requirements and note actual building height based off grade plane elevation
c. Roof: Show roof overhang dimensions and chimney clearances from roof. Indicate pitch of roof, or minimum slope to drain. Show mechanical equipment and its screening
d. Note class of roofing material
e. Openings: Show doors, windows, skylights, and any type of openable vents in windows
f. Decks: Indicate height of guardrails and spacing of intermediate rails
g. Note all ramps, signs, etc. for compliance with accessibility requirements.
h. Note materials as approved by the Development Commission (specific reference to manufacturer required). This requirement is not applicable to Issaquah Highlands
i. Show highest and lowest points of all awnings, canopies, windows, doors and archways

## 7. Architectural Foundation Plan

a. Foundation wall: Show shape, all dimensions including maximum wall heights and all connections
b. Provide foundation sections at various points around foundation system
c. If crawl space is included, show location and size of all vents, access size and location, and an evaluation of the required ventilation area
d. Show and label space integral with foundation (i.e.: basement, garage, storage areas)
e. Foundation vent size, locations and calculations
f. Footing drains, under-slab requirements and details per geotechnical report
g. All detail callouts must be accurately cross-referenced to the appropriate location on the plans

## 8. Typical Floor Plans

a. Indicate square footage for each floor including covered decks, porches, garages and carports
b. Floor layout: Show arrangement of walls. Note proposed use and dimensions of all areas. Show stairs, corridors, elevators, restrooms and ramps
c. Windows and doors: Show location and dimensions of new, removed or replaced windows, doors and skylights
d. Fixture locations: Show location of exit signs, handicapped signs, fire extinguishers, fans, vents, smoke detectors, plumbing fixtures, mechanical equipment, standpipes, etc.
e. Show location and detail construction of all vertical and horizontal fire resistive separations including fire walls, fire barriers, fire partitions, smoke partitions and draft-stops
f. Indicate ADA access to the building and all spaces required by the International Building Code (IBC) and ANSI 117.1. Include dimensions and notes regarding maximum door sill heights, ramp slopes, hardware type and heights of all accessory features (i.e.: water fountains, telephones, directional signs, etc.). Show required clear floor spaces at doors and in all bathrooms
g. All detail callouts must be accurately cross referenced to the appropriate location on the plans

## 9. Reflected Ceiling Plans

a. Show locations of suspended ceilings
b. Show schematic of light switching in accordance with energy code
c. Show details of suspended ceiling support system

## 10. Architectural Cross Sections and Details

a. Show typical wall, floor and roof assemblies and ratings. Call out all material types and thicknesses. Call out approval agency and listing number for rated assemblies. All components of tested assemblies must be called out on the drawings so the contractor can build the assembly and the inspector can inspect the assembly from the plans. Cut sheets from tested assemblies included on the plan sheets are acceptable
b. Provide sections through shafts and stair enclosures and include details at floor and roof intersections showing continuity
c. Show protection for all penetrations (plumbing, electrical, communication) of assemblies. Show and detail all shaft construction. If providing as a deferred submittal, this must be specifically noted on the Cover Sheet
d. Call out all door and window ratings, type of windows and closure equipment. Indicate window U-values for Energy Code compliance
e. Show all vertical or horizontal occupancy separations and/or fire wall and fire barrier assemblies. Specify/show assembly components and construction
f. Show all details for compliance with the Accessibility Code
g. Show section and details of dumpster enclosure

## 11. Roof Plan

a. Specify roof slope: Indicate hips, valleys, gables and ridge
b. Indicate method of roof venting. Show details and calculations for area vented
c. Indicate roof drains and overflow drains. Provide roof drain piping calculations. Show size and location of roof drains and scuppers. Specify materials and provide waterproofing and flashing details

## 12. Door, Window, Hardware and Finish Schedule

a. Show door size, rating and hardware. All hardware information must be on the drawings to indicate smoke gasketing, closing devices, exit hardware
b. Show flame spread of finishes per the current version of the IBC
c. Show window size, opening size and direction

d. Specify u-values and SHGC (solar heat gain coefficients)
e. Show/specify hardware compliance with ADA requirements

## 13. Structural Foundation Plan

a. Accurately locate all columns, footings and grade beams. Indicate size and reinforcing of all members
b. Provide column connection details. Indicate any framing anchors, welds, anchor bolts, grout, etc.
c. Show floor system structural size, spacing direction, support, connections, blocking, etc.
d. All detail callouts must be accurately cross-referenced to the appropriate location on the plans

## 14. Roof, Floor and Deck Framing Plans

a. Roof, floor and deck structural system: show size, spacing, direction, support, connections, blocking, etc.
b. Show all bearing walls and column/beam support to footing
c. Show mechanical equipment locations and its support system. Include weight assumed for all equipment
d. All detail callouts must be accurately cross-referenced to the appropriate location on the plans

## 15. Structural Cross Sections and Details

a. Show typical wall section with all materials labeled, size and spacing of all members. Include all dimensions, height, insulation, sheathing, connections, siding, etc.
b. Show all lateral engineering details that specifically show complete load path through nailing for top plate, bottom plate, roof sheathing to wall, cantilevered floors, roof edge nailing, and interior shear walls. All details must be referenced on plan at all appropriate locations. Also, include details and locations of hold down straps/anchors
c. Show typical roof section with all materials labeled, size and spacing of all members. Include all dimensions, venting, insulation, connections, sheathing, type of roofing, slope of roof. Show scupper, overflow and downspout details. Note that many of these details are typically included in architectural detailing and need not be duplicated in structural drawings
d. Show typical foundation section with all materials labeled, size and spacing of all members, all dimensions. Include: wall thickness, rebar size and spacing, rebar clearance, footing depth below grade, clearance between grade and sill plate, maximum wall height, connections, anchor bolt size and spacing, connection between floor diaphragm and foundations, slab thickness, drainage for foundation retaining wall

## 16. Structural Notes

a. Specify all design loads and include: live (including floor, stairs, etc.), dead (including mechanical equipment, materials, etc.), wind, earthquake, snow, equivalent fluid pressure, soil bearing, etc.
b. Specify minimum design concrete strength, concrete sack mix, and reinforcing bar grade
c. Specify the grade and species of all framing lumber
d. Specify the combination symbol (strength) of all GLU-LAM beams
e. Specify metal connectors, including joist hangers, clips, post caps, post bases, etc.

## 17. Lateral (Seismic) and Gravity Design

a. Provide lateral wind and seismic calculation comparisons
b. Provide complete lateral calculation analysis for controlling wind or seismic load
c. Provide details showing complete load path transfer at roof perimeter, interior shear walls, cantilevered floors, offset shear walls and ceiling diaphragm to shear walls (if used)
d. Engineer's stamp required on drawing and calculations
e. Provide shear wall schedule noting nail spacing, blocking, bolts, top and bottom plate nailing
f. Locate hold down straps on plan
g. Provide hold down details for various conditions
h. All structural calculations for gravity and lateral design must include a key plan or similar way of identifying beams, headers, girder trusses and shear walls noted in the calculations with those indicated on the plans.

**Plans submitted that do not identify and coordinate this information with calculations will be considered insufficient and not accepted for permit submittal**

## 18. Energy Code Data

a. Provide commercial compliance forms for Building Envelope, Lighting, and Mechanical; refer to Northwest Energy Efficiency Council website. Include forms on the appropriate plan sheets
b. Compliance forms must be completely filled out including the checklists that identify the location information is provided in the documents
c. Identify insulation R-values or assembly U-values for each wall, floor, and roof/ceiling assembly in the exterior envelope
d. Indicate U-values of all glazing in the exterior envelope
e. Provide energy code compliance notes and specify method of compliance in summary
f. Provide lighting fixture tables noting watts in coordination with compliance forms for interior and exterior lighting

## 19. Plumbing

a. Plumbing plans must be submitted with all applications and may not be a deferred submittal
b. **Plumbing plans are required for**:
   - Commercial projects with over 10 fixtures
   - Multifamily projects over 4 dwelling units
   - All commercial kitchens for food service (does not include office lunchrooms)
   - Grease traps, grease interceptors, or oil-water separators
   - Septic systems or private sewer or water lines (septic systems require County Department of Health approval)
c. **Required information**:
   - Drawings for commercial projects over 4,000 s.f. must be stamped and signed by an engineer or architect licensed in the State of Washington. The name and address of the person responsible for the drawings and the address of the project should be included on the plans
   - Grease interceptors are required to be designed and stamped by a licensed mechanical engineer.
   - Isometric drawings are required for buildings over 3 stories, commercial kitchens and grocery stores.
   - Line drawings must show all piping (water, gas, waste and vent) materials, sizes and lengths, water source and entry, shut-off isolating valves, and backflow prevention device(s).
   - Provide a fixture schedule showing the number, types and locations of all fixtures
   - Include details showing construction of interceptors, piping support, firestop penetration systems, etc.
   - Calculations must be provided for water meter sizing and DWV fixture units for building drain.

## 20. Mechanical

a. Mechanical plans must be submitted with all applications and may not be a deferred submittal
b. **Mechanical plans are required for any of the following conditions**:
   - Multifamily projects over 4 dwelling units
   - All commercial kitchen type I hoods
   - All grease interceptors
   - All rooftop or floor mounted units over 400 lbs. (Structural details and calculations are required)
   - All new commercial buildings
   - Tenant improvements over 1,000 s.f.
c. **Required information** (Plans that do not contain the following minimum information will not be accepted for plan check)
   - Plans shall be of sufficient clarity to indicate the location, nature and extent of the work proposed.
   - Show that the work will conform to the provisions of the adopted Codes and ordinances including the International Mechanical and Fuel Gas Codes with WA State Amendments

- Plans must note the construction type of the building and show all fire rated assemblies, fire/smoke dampers, etc.

d. Equipment Schedules Provide Manufacturer's Product Data Sheets
   - Provide complete equipment schedules for cooling and heating equipment on drawings. Specify the quantity, manufacturer, model, number, capacities (input and output), SEER/EER, efficiency, cfm and operating weight of all equipment. Specify OSA capacities. Include economizers on equipment schedules
   - Fan schedule should specify manufacturer, model number, cfm, static pressure, HP/ BHP and flow control types (VAV, constant volume, or variable speed)
   - A brief description of equipment operations and controls, show location and size of combustion air sources for fuel burning appliances

e. Structural
   - Provide framing plans and calculations for vertical and lateral loads stamped by a Washington State registered professional engineer for units weighing more than 400 lbs.
   - Roof curb designs must be provided for all roof mounted mechanical equipment. If factory curbs will be used, provide details. Specify the type, amount and location of fasteners.
   - All floor supported mechanical equipment and fixed appliances must be anchored to the structure to resist displacement vertically and on both horizontal axis' due to seismic motion. Specify anchorage for floor supported equipment on plans.
   - Suspended mechanical equipment and appliances shall have rigid vertical hangers and be braced in both horizontal directions. Connections by pipes or ducts that are or contain non-rigid elements are not of inherent sufficient strength, or which are not adequately anchored will not be acceptable as equipment or appliance anchors. Detail anchorage for suspended equipment on drawings.

f. Make-Up Air
   - Ventilation air supply shall be sufficient to provide make-up air for exhaust systems when required by the IMC or IFGC. Make-up air systems shall be electrically inter-locked with their associated exhaust systems. IMC 508.1
   - Ducts in ventilation supply air systems shall be sized as required by the equipment manufacturer's approved installation instructions or approved good engineering practice. IMC Sec. 403.3
   - Provide calculations showing compliance with the ventilation requirements of the 2003 Washington State Ventilation and Indoor Air Quality Code (51-13 WAC). The mechanical ventilation system shall be capable of supplying ventilation air to each zone with the minimum outdoor air quantities specified in WSVIAQ Table 3-4

g. Ducts IMC Chapter 6
   - Show locations of all heating, cooling and ventilating equipment
   - Show duct layouts: Include size, duct gauge (if metal) and register locations. Specify cfm ratings. Show materials, spacing and size of supports for all ducts as set forth in IMC Table 603.10
   - Indicate the R-value of duct insulation to comply with WSEC Table 14-5
   - Either architectural plans that specify the use and dimensions of all rooms and show the fire-rated corridors, walls, ceilings and/or floors should be submitted or the mechanical plans should show that same information

h. Smoke Detection and Dampers
   Smoke Detection and Dampers shall be shown to comply with recognized standards (Fire Dampers UL 555, Ceiling Dampers 555C)

- Air-moving systems supplying air in excess of 2,000 cfm. to enclosed spaces within buildings shall be equipped with an automatic shutoff. Automatic shutoff shall be accomplished by interrupting the power source of the air-moving-equipment upon detection of smoke in the main return-air duct served by such equipment. Smoke detectors shall be labeled by an approved agency for air-duct installation and shall be installed in accordance with the manufacturer's installation instructions. Such devices shall be compatible with the operating velocities, pressures and temperatures of the system. Where fire detection or alarm systems are provided for the building, the smoke detectors required by this section shall be supervised by such systems. IMC 606.2
- Ceiling dampers shall be installed in the fire resistive ceiling elements of floor-ceiling and roof-ceiling assemblies. Fire dampers not meeting the temperature limitation of ceiling dampers shall not be used as substitutes
- Provide details to show that the duct work will be connected to damper sleeves or assemblies in such a way that collapse of duct work will not dislodge the damper. IMC Sec. 607.2, manufacturer's installation instructions and IBC Sec. 712.2
- Indicate on plans that fire dampers will be equipped with access doors labeled "FIRE DAMPER" as required by IMC 607.4.

i. General
- Separate temperature controls shall be provided for each zone and shall be shown on plans. When used to control both heating and cooling, thermostatic controls shall be capable of a dead-band of at least 5ºF. WSEC 1412.2
- All mechanical equipment should be listed and labeled by an approved testing agency. If not, complete information on the equipment, including manufacturers' data sheets, test reports, etc., should be provided to allow for evaluation. Testing by an approved testing laboratory may be required before final approval is granted
- Show required access for roof mounted equipment per IMC Sec. 306.5
- A 120-volt receptacle shall be shown within 25' of each piece of equipment. ICC Electrical Code
- Specify that an accessible gas shut-off valve will be installed within 6' of all gas appliances. International Fuel Gas Code Sec 409.5

## 21. Electrical

a. Electrical plans must be submitted with all applications and may not be a deferred submittal
b. **Electrical plans are required for:**
- All new commercial buildings
- All multi-family projects over 3 stories
- Tenant improvements over 1,000 s.f.
- Other projects where necessary to provide required information

c. **Required information** (Plans that do not contain the following minimum information will not be accepted for plan check):
- Plans shall be of sufficient clarity to indicate the location, nature and extent of the work proposed; however, a separate permit through Labor & Industries is required for your electrical permit
- Electrical drawings must include location of exit signs, lighting plans showing regular and emergency lighting, smoke and carbon monoxide detectors, information on any standby or emergency power systems, specialty electrical equipment required for building code compliance, information justifying energy code compliance, etc.

## 22. Exterior lighting plan

a. This information can be incorporated and noted on the Planting Plan
b. Include a photometric site building exterior and parking area lighting plan. In addition, compliance with the Washington state energy code lighting provisions is also required
c. Provide fixture cut sheets and details, including pole and mounting height for all proposed fixtures. All fixtures must be designed to prevent light spillage to adjacent properties

### 23. Construction coordination plan

The construction coordination plan may be incorporated into other site drawings if so desired

a. Indicate areas reserved for contractor employee parking. Areas that are to be shared with a neighboring business must include a copy of the contract or agreement with the neighboring business.
b. Indicate construction vehicle wash down areas. Also, include the location of the nearest fire hydrant or other water service. Show where runoff water will be collected and how it will be treated
c. Preconstruction water supply will require a Hydrant Meter Use permit obtained from Public Works Operations. Call 425-837-3470
d. Indicate construction access to the site. Also, indicate which access point is to be the primary reception point for the delivery of construction materials. Note that City streets may not be blocked for the unloading of construction materials
e. A statement related to clearing and grading, describing the proposed disposal site with anticipated haul routes

## V. Additional Permits Required

### 1. Irrigation Backflow Device

A backflow device is required for any irrigation system. A separate over the counter plumbing permit must be pulled by the contractor performing the work

### 2. Fire Sprinkler

Site, plat or building construction may require that a fire sprinkler system be installed. If a fire sprinkler system is installed, a separate fire sprinkler permit is required

### 3. Fire Alarm

Site, plat or building construction may require that a fire alarm system be installed. If alarm system is installed, a separate fire alarm permit is required

### 4. Fire Suppression

A separate fire suppression permit required for any suppression systems

### 5. Landscape Permit

Please coordinate with your planner for landscape submittal

### 6. Underground Fire Line

Contact the engineer reviewing your project for more information

### 7. Electrical Permit

Electrical permits are reviewed and issued by the Washington State Department of Labor and Industries. The closest L&I office is located in Bellevue (Phone: 425-990-1400):

616 120th Ave. N.E., Ste. C201
Bellevue, WA (map)

### 8. King County Department of Health (Septic)

For lots not served by sewers, an approved septic design from the King County Department of Public Health is required prior to submitting a building permit application. You may contact them at (Phone: 206-296-4932):

Eastgate Environmental Health Services (website)
14350 SE Eastgate Way (map)
Bellevue, WA 98007

## 9. Backflow Device Plumbing Permit

- All commercial, retail, multi-family or single family construction, remodel or tenant improvement (projects) will be subject to City and State regulations with respect to maintaining drinking water quality. Public Works Operations' Division of Drinking Water, Water Quality (WQ) section, is responsible for maintaining drinking water quality by eliminating or controlling, through the use of backflow prevention devices, all cross-connections between any fixture and piece of equipment plumbed into any pressurized water piping inside or outside the structure.

- All projects shall be subject to a Water Quality inspection. The project representative shall be responsible for contacting a City of Issaquah Water Quality (WQ) Technician for an inspection and discussion of backflow prevention compliance. Early and consistent dialogue should be maintained throughout the project to address issues as they present themselves.

- The WQ inspection is to identify and isolate threats to the public water system as well as the potable plumbing inside the property. If, during plan review **or** onsite inspection, the project or a subcomponent thereof is determined to pose a high degree of threat to the public water system, the connection to the public water system shall be protected with "Premise Isolation," a term used that indicates a backflow prevention device must be installed immediately behind the water meter. A reduced pressure backflow assembly (RPBA) shall be installed on the property side of the water meter in an above-ground insulated box or within a mechanical room (first wall penetration). If a constant water supply is necessary, the property owner should consider installing two RPBAs in parallel to avoid interruption of service during testing and/or repair. Should the RPBAs be installed at the meter in an insulated above-ground box, it is strongly recommended that power be installed to the enclosure for heat, to assist with freeze protection.

- Auxiliary water sources such as wells, rainwater harvesting, gray water collection, storm water reuse, or any other source other than the City of Issaquah's water system, will require Premise Isolation on the domestic, fire, and irrigation supply meters. In addition, make-up water to these systems inside the property will also be isolated with an RPBA.

- Fire lines to properties shall be isolated and metered. If fire line is 2" or less, a Double Check Valve Assembly (DCVA) shall be installed plus a separate, in-line water service meter. For lines greater than 2", a Double Check Detector Assembly (DCDA) may be installed. Chemical addition, i.e. anti-freeze or foam, or an auxiliary water source will increase the degree of hazard and would require a RPBA or a Reduced Pressure Detector Assembly.

- Irrigation connections shall be isolated with a DCVA. Chemical addition or an auxiliary water source would increase the degree of hazard and would require an RPBA.

- Some other common threats that require isolation with an RPBA are fountains or water features, swimming pools, janitorial chemical/soap dispensers, boiler make-up water, ice machines, espresso machines, commercial laundry machines, commercial dishwashers and carbonators generally associated with soda dispensers. These examples and other identified threats will require a separate RPBA for each, unless approved by a WQ Technician.

This should be considered a general list of common threats to water quality. Please contact a Water Quality Technician with any questions or concerns. A plumbing permit is required for the installation of backflow prevention devices. The number of devices on the permit must match the number installed. Installation of assemblies shall conform to WAC 246-290, the City of Issaquah and recommended manufacturer's instructions. Competed test reports for assemblies will be required before or at the time of final inspection.

**City of Issaquah Public Works Operations**
**Division of Drinking Water, Water Quality Section**
**425-837-3470**